



Soils in Planning and Construction A Journey

Presented to TDAG by Birgit Höntzsch, Senior Project Lead, Cornwall Council, 07 Dec 2022



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World Soil Day 2022 (#WorldSoilDay) and its campaign "Soils: Where food begins" aims to raise awareness of the importance of maintaining healthy ecosystems and human well-being by addressing the growing challenges in soil management, increasing soil awareness and encouraging societies to improve soil health.

World Soil Day | United Nations

Planning and construction sectors have their role to play in addressing sustainable soil management, increasing soil awareness and improving soil health. Soils are a resource, not waste.



Cornwall Council and the Soils Task Force

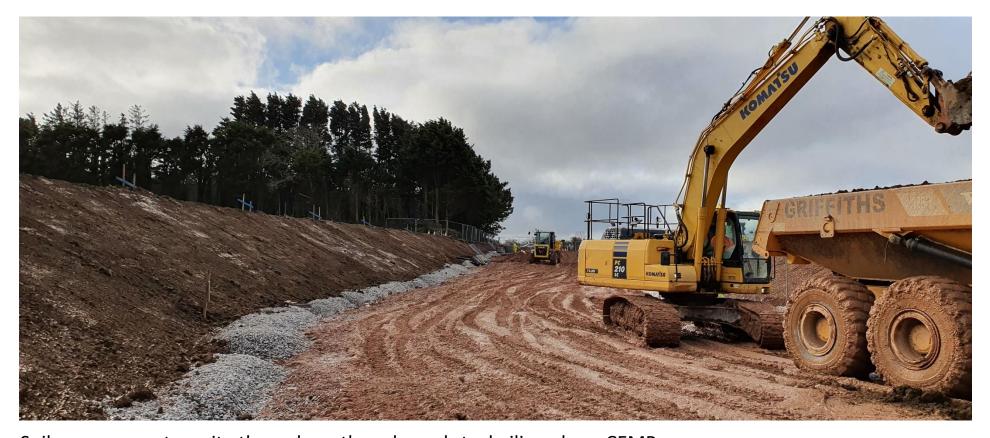


- Garden Communities Programme Member
- Sustainability credentials for New Communities
- Contacts made with other New Communities
- Soils identified as a not so well understood subject
- Soils Task Force as opportunity to further our thinking
- Soils strategy appended to planning consent for Langarth Garden Village



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Enabling Works at Langarth



Soil management on site through earthworks and stockpiling plans, CEMPs. Working to minimise or avoid cart away – based on cost rather than sustainability considerations, logistical challenges.

How can we affect a shift in thinking about soils as a resource rather than waste throughout the project life cycle? What are the challenges and possible solutions? What could best practice look like?



Why is this important

The loss to landfill is 10 times greater than the 2.9M tonnes of soil lost to erosion in the UK

Soil erosion on construction sites can be 100 times greater than on agricultural soils

2018 - 29.5 million tonnes of soil from construction sites to landfill, only 0.6% was hazardous

Compaction can reduce water infiltration by 70-99% 2013 - soil carbon losses due to development were estimated at 6.1 million tonnes of CO2

Soil is the second largest carbon store on earth, after the oceans

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See Soils in Planning and Construction Report for references to sources of these facts and more.

The Report

- Overview of current policy and guidance in UK
- Three key barriers and how these could be overcome:
 - 1. Soil is not understood and not valued
 - 2. Lack of soil data availability
 - 3. Time and space constraints
- Eight guiding principles for Soils in Planning & Construction – discussed further on next slide
- Specific actions for Local Authorities, Clients and Developers, Design Teams and Contractors





Soils in Planning and Construction Guiding Principles through Project Stages

	Project Stages					
Guiding Principles from Report	Inception / Concept	Design Process	Planning Application	Site Preparation	Construction	Operation
1 Plan, design and construct for soil functions – including soil carbon storage and reducing CO2 emissions, water						
infiltration and flood mitigation, soil biodiversity, and optimal support for above ground vegetation and trees						
2 Engage local communities and stakeholders on soil issues and development						
3 Reuse or share soil – maximise use of soil on site and share excess soil to ensure there is no loss to landfill						
4 Maximise permeability – minimise soil sealed area and maximise permeable paving to allow water to infiltrate and						
soil to respire; manage draining on-site using SuDS rather than off-site						
5 Minimise compaction – plan haul routes and materials storage and designate Soil Protection Zones (SPZs) where soil is protected from traffic, stripping and stockpiling						
6 Stockpile correctly – minimise the duration and size of stockpiles, ensure topsoil and subsoil are separated and do						
not become mixed or contaminated						
7 Minimise erosion – prevent sediment loss by use of vegetation cover, seeding, mulching, silt fences or rolls, or						
geotextiles, particularly on slopes and stockpiles						
8 Learn through training – engage with soil professionals to continually develop best practice						



How Cornwall Council plans to continue the journey towards greater soil sustainability

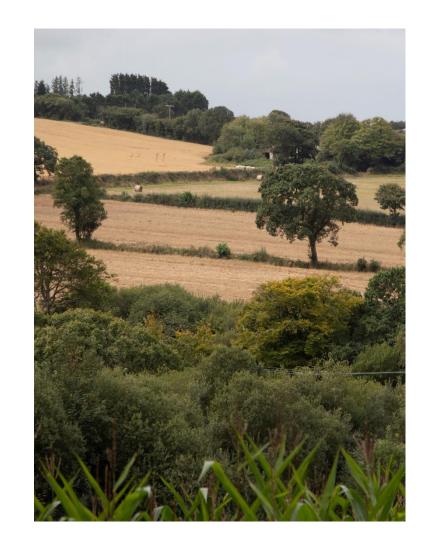
Policy – consider soils in future Local Plan iterations (including in its Climate Emergency DPD)

Planning – use the LPA function of the Council to support applicants in addressing soil sustainability

Guidance – use the Soils in Planning and Construction Report to promote with third parties

Sites – explore options to apply best practice on Cornwall Council sites and with Cornwall Council partners and companies

Skills – raise awareness with our staff about soils, and encourage third parties in the planning and construction sectors to do the same





Thank you / Meur ras

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Soils Task Force website - <u>Home | Soils Task Force</u> Report can be downloaded from the website